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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/053,558

01/24/2002

Simon G. Ingram

12086

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05/16/2006

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EXAMINER

SELBY, GEVELL V

ART UNIT

PAPER NUMBER

2622

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/053,558	Applicant(s) INGRAM, SIMON G.	
	Examiner Gevell Selby	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2 and 4-8 is/are allowed.
- 6) ☒ Claim(s) 3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/7/06 has been entered.

Response to Arguments

2. Applicant's arguments filed 4/7/06 have been fully considered but they are not persuasive. The applicant submits the prior art does not disclose the following limitations of claim 3:

The first time interval overlaps the second time interval; the third time interval includes no overlapping time with the first time interval; and the third time interval includes no overlapping time with the second time interval, as stated in claim 3. The Examiner respectfully disagrees.

Examiner's Reply:

Re claim 3) The Glenn reference discloses a camera with a shutter (660) that has an open sector (661) which opposes a dark opaque sector (662), as well as opposing mirror or reflection sectors (663 and 664: see column 4, lines 37-41). The open section exposes the Y sensor (130, second sensor) and two mirror sections expose the color sensor (130, first sensor: see column 4, lines 43-44). The claim does not define the start and stop times of intervals, only that a certain operation

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is including in the interval; therefore, the interval can be defined as any time period including the specified operation. The examiner reads the first time interval of the Glenn reference as starting when the first reflective sector moves into the optical path to expose the first sensor, continuing when the open sector moves into the optical path, and continuing until the second reflective sector has rotated in and then out of the optical path, since the first image sensor is integrated over this time interval as interpreted from the configuration of the shutter in figure 6 and the reference above. The examiner reads the second time interval as the time the open sector exposes the Y sensor, which is included entirely in the first time interval, since the second sensor is integrated over this time interval as interpreted from the configuration of the shutter in figure 6 and the reference above. Therefore, the two intervals overlap. The Examiner reads the third time interval as the time the opaque sector is in the optical path and the vertical transfer to the storage registers occurs for both sensors (see column 4, lines 41-43). The third time interval does not overlap the first or second intervals, since only readout occurs. Therefore, the Glenn reference discloses all the limitations of claim 3.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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2. Claim 3 is rejected under 35 U.S.C. 102(e) as being anticipated by Glenn, US 6,891,568.

In regard to claim 3, Glenn, US 6,891,568, a method comprising steps of (1) operating a first sensor (130) of a camera to integrate a first charge over a first time interval (see column 4, lines 35-45: It is inherent the first sensor integrates the light received over a time interval that includes rotating the reflective sections (663 and 664) into the light path in order to be able to scan the signals), (2) operating a second sensor (120) of the camera to integrate a second charge over a second time interval and (see column 4, lines 35-45: It is inherent the second sensor integrates the light received over a time interval the includes rotating the transmission section (661) in order to be able to scan the signals) (3) scanning the first and second sensors to readout the respective first and second charges during a third time interval (see column 4, lines 40-42), wherein:

the step of operating the first sensor includes integrating the first charge in the first sensor while a first image light reflects from a first reflection sector of a rotatable structure onto the first sensor (see column 4, lines 43-44);

the step of operating the second sensor includes integrating the first charge in the second sensor while a second image light passes through a first transmission sector of the rotatable structure onto the second sensor(see column 4, lines 43-44);

the step of scanning includes transferring the integrated first and second charges from the respective first and second sensors while a first opaque sector on

the rotatable structure prevents the first and second image light from impinging on at least one of the first and second sensors (see column 4, lines 40-43);

the first time interval overlaps the second time interval (see column 4, lines 37-43: the second time interval occurs in the middle of the first time interval);

the third time interval includes no overlapping time with the first time interval (see column 4, lines 37-45: the third time period starts after both sensors have finished integrating to transfer the data); and

the third time interval includes no overlapping time with the second time interval (see column 4, lines 37-45: the third time period starts after both sensors have finished integrating to transfer the data).

Allowable Subject Matter

3. Claims 1, 2, and 4-8 are allowed.
4. The following is a statement of reasons for the indication of allowable subject matter:

In regard to claims 1, 2, and 8, the prior art does not disclose a camera with the combination of limitations specified in the claimed invention, specifically the limitations of: “a rotatable structure disposed to define a rotation plane that is oblique to both the reflected axis and the direct axis, the rotatable structure having a first reflection sector, a first opaque sector disposed adjacent to the first reflection section, a first transmission sector disposed adjacent to the first opaque sector, a second reflection sector disposed

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adjacent to the first transmission sector, and a second transmission sector disposed adjacent to the second reflection sector” as claimed in claim 1.

In regard to claims 4-7, the prior art does not disclose a camera with the combination of limitations specified in the claimed invention, specifically the limitations of: “the operating of the second sensor further includes integrating the second charge in the second sensor while the second image light passes through a second transmission sector of the rotatable structure onto the second sensor”, as claimed in claims 4 and 5.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gevell Selby whose telephone number is 571-272-7369. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on 571-272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gvs


TUAN HO
PRIMARY EXAMINER